APPENDIX A

Excerpts from Affidavits of Executives of Shoe Manufacturing Companies Regarding Increasing Competition in the Shoe Machinery Industry Since Entry of the Decree.

James Forma, President of Lawrence Maid Footwear:

5. Under the conditions created by the decree I consider that I am in a position to choose just what shoe machinery I want for my varying techniques of manufacture and I try to pick the cream of the machines. My present inventory includes United machines, Lamac, Schwabe, International, Lauretti, Allied, Young wood heel nailers, and other types. I always look to see what machines will do for me rather than what they will cost as a matter of dollars, because my emphasis is on production. I feel that competition in shoe machinery exists in a full degree and that I have no difficulty in picking the kind of machines I want. (D. Ex. 24, admitted Tr. 609)

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Francis H. Gleason, President of J.F. McElwain Company, a division of Melville Shoe Corporation:

7. Our company received at the time a copy of the Court's decree entered against United Shoe Machinery Corporation, and it appears to me that United has fully lived up to this decree. There now exists in the shoe machinery market full and free competition allowing us as manufacturers to select our machinery as we wish on the merits of the machines available and in accordance with the processes we select to meet the various style changes which are constantly imposed on us by the market. (D. Ex. 25, admitted Tr. 609)

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John R. DeWitt, Vice President for Manufacturing of J. F. McElwain Company, a division of Melville Shoe Corporation:

2. My job as Vice President for Manufacturing since 1959 and to a subordinate degree previously as Assistant to the Vice President was to O.K. the machinery to be adopted in the second stage after the financial appraisal had been made by Mr. Francis H. Gleason and other executives. In the selection of machinery I had to stay close to the style program set by the buyers for the Melville stores. I was assisted by the Product Development and Industrial Engineering Departments in evaluating different shoe machines for the requisite process. My method was to choose the type of manufacture on the basis of the style called for by the buyers and then to tell my purchasing agent, David Spofford, what general types of machines were needed for the process adopted. Mr. Spofford would then use his extensive knowledge acquired through visiting shoe machinery shows, reading catalogs and trade papers, and interviews with suppliers, to request trials of several different competitive makes for the operation in question. Frequently there would be two or three trials in our factory at the same time. The machines finally selected would be chosen on the basis of cost, efficiency and suitability for our purposes in every respect.

We like to conserve our money to buy the Fortunas, Schwabe and other machines which are not available for lease. We have used our cash, for example, to buy Jupiter stitchers in 1960 when we spent $130,000 for theses machines after comparing them on a cost evaluation basis against the United's OSA machines.

6. The result of the United Shoe Machinery decree (1953), so far as I can see, has been to render competition perfectly free and open and to give us an increasingly wide selection of machinery for our develop-

ing processes. In particular, the rise of the cement process in the men's shoe field and introduction of the lighter and simpler cement machinery in which United did not pioneer has brought forward other companies on a level with United, able to compete and manufacture machines on equal footing with United. (D. Ex. 26, admitted Tr. 609)

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Rudolph (Rolf) Bieringer, Plant Manager of Ludington Footwear Co. (a subsidiary of LaMarquise Footwear, Inc.):

6. Since the United Shoe decree in 1953 I have observed more competition among shoe machinery suppliers. This came from International Shoe Machine, Bata, Compo, Schwabe, Industrial Shoe Machinery Co., Lewiston Shoe Machine Co., and from foreign machines (e.g. the Moenus heel seat laster distributed by Compo) as well as from United. United also appears to have developed more machines faster in recent years. The Ludington factory now does much more machine work than used to be done under former manufacturing processes. (D. Ex. 29, admitted Tr. 609)

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Milton M. Isenberg, President of Continental Shoe Corporation, a division of Consolidated National Shoe Corporation:

4. Since the decree in the United Shoe Machinery case I have found ample competition among machinery suppliers. When I first came to Continental we were 100% on Goodyear welt with all United machinery. The four-year transition into cements was made with United machinery, but I found the Kamborian thermalaster cheaper and more efficient than the staple laster. The bulk of our business is low-heel shoes between 4/8's and 6/8's and we make no heels higher than

14/8's. As we transferred to cement manufacture, having begun with United machines, I got in United's LMA and later the TLA, but I found both unsatisfactory for our methods because with these machines I could not control our shoemaking. Among United machines I had only the #6 left for toe lasting and it is used for repairing. I therefore transferred to the International (Kamborian) toe lasters which did an adequate job for our kind of manufacture.

In general, for our kind of manufacture I found that United was too slow as regards machines or the cement process, and that its competitors got in first. For example, I had to go to Compo for roughers. I brought in some United sole presses, but later I replaced them with two Schwabe presses, which I purchased and which were the hydraulic two-station type.

In fact, today when I look for machines I shop around much more than I ever did and I look for other machines besides United. For example, recently I have taken on a Young wood heel nailer. According to my observation United has complied with the decree in every respect and I feel that machinery competition now exists in the full sense satisfactory to the shoe manufacturers. (D. Ex. 30, admitted Tr. 609)

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Richard P. Curtis, Vice President and Secretary of Curtis-Stephens-Embry Co.:

Certainly, as compared with 10 years ago, there is substantial competition in shoe machinery. This can readily be seen at shoe machinery shows, which we attend for the purpose of keeping abreast of developments. In addition to the domestic shoe machinery manufacturers, there is available a large and growing number of shoe mchines made in Europe. (D. Ex. 31, admitted Tr. 609)

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Milton Carmel, partner in Sham-O-Kin Shoe Company:

I am convinced that this market has changed radically from when I first entered the shoe industry. Neither we nor any shoe manufacturer are dependent upon United Shoe Machinery Corporation. There is plenty of competition in the shoe machinery business. Salesmen for competing concerns—both new and second-hand—visit us and solicit our business constantly. I have in my own factory machinery made by as diverse manufacturers as Schwabe, International, Allied, Ludlow, Circle, Western Supplies, Boston Machine Works, Markem, Industrial Shoe Machinery Corp., Union Lockstitch Co., Bata, and others. I use machines of different manufacture, side by side, for the same operations. For example, our pulling-over is done on both Schwabe and United machines; similarly, our clicking (die cutting) is done by United, Bata, and Schwabe machines.

I use heel nailers obtained from a competitor of United for considerably less than the price United charges. Generally, a great many of United's prices for its machinery are higher than the prices charged by its competitors for a mahcine which will do the same job. Accordingly, I often buy the competitor's machines. While United's prices are high in that respect, its machines are also designed for greater flexibility (to accomplish more variation in their function) and are designed for long life. In these respects they are clearly superior machines; but for my use many of these attributes are unnecessary and I buy a more economical machine. (D. Ex. 32, admitted Tr. 609)

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Abraham B. Rubin, Vice President of Muskin Shoe Co.:

6. There is no question that more machinery manufacturers have come into the picture during the last

ten years. As sources for machinery now, we have United, Compo, Ralph's Schwabe, International Shoe Machine Corp., Independent Shoe Machinery Corp., Industrial Shoe Machinery Corp., Circle Machine Co. (of Haverhill), Ludlow and others. We consider machinery from all such sources when making new acquisitions.

For example, in March or April of this year we were interested in acquiring some toe lasting machines. We had had experience with the International (Kamborian) toe lasters in the past. Nevertheless, we traveled to Boston to inspect the United toe lasters, considered the Astra toe laster and looked at one in operation at the Miller-Hess factory (these two machines were a combination pulling over and toe-lasting type recently available); we also considered the Schoen toe laster offered by Herman Schwabe Inc.; and ultimately decided to purchase the machine manufactured by International Shoe Machinery Corp. The incident illustrates the need for alertness to new developments in the industry, such as "combination" lasting.

7. When we are unfamiliar or undecided with respect to new machinery, we are apt to test it in the factory. We have twice tried nailing machines manufactured by Herman Schwabe, Inc., and ultimately bought from United an equivalent machine at four times the price, because of its superior performance. Currently, we employ Compo presses, Compo roughers, Compo bottom cementers, and Compo sole cementing machines. We also utilize a good deal of United machinery. In our experience, it is quite common for one manufacturer to have one superior product in a given line, and we then buy that machine for its particular job. In addition, the question of timing is sometimes important. For example, when International developed its toe laster before United did so, we obtained the International

model and became accustomed to it. When United marketed its model, we had no interest in changing over.

We prefer the Circle automatic edge trimmer to the model marketed by United, and we use the Circle machine. (D. Ex. 34, admitted Tr. 609)

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Samuel L. Slosberg, Chairman of the Board of The Green Shoe Manuafacturing Company:

7. With its high and continuous production volume, the Company has always tried to keep closely in touch with development of improved and new machines. This has been particularly true in the last decade. We have tried to keep in touch with the machinery manufacturers throughout the world. We have usually sent representatives to all world industry fairs and shows where new processes and operations and improved and new machines are displayed. It has been our policy to try to learn everything that is presently available and all advances under development which may soon be introduced. We have over the years had particular opportunities in this regard because our high and diversified production has led to frequent use of our factory for test purposes by machinery manufacturers and distributors. Thus we standardized on Bata clickers before the decree was entered in the United litigation, and similarly on edge trimmers and heel shavers manufactured by the British Hawkes concern and distributed by Harris of Lynn.

The Company has also bought new machines from United and from other manufacturers, including Bata, Compo, Diamond, Industrial, International and Schwabe of the domestic group, Hawkes of England, Pederson of Denmark and Spang & Brand of Germany, acquired from distributors in this country. Regard-

ing new United machine types, it has been and is the Company's policy to lease at first to acquire experience as to performance and cost and then either to buy or return the machine in accordance with the Form B lease provisions. The Company's machines, other than dry-thread sewing machines, now total 1159, of which 571 are of United manufacture, 85 Bata, 82 Compo, 46 Hawkes, 29 Freeman, 7 W. J. Young and 339 others. 17 of the 571 machines of United manufacture are leased from United. (D. Ex. 36, admitted Tr. 609)

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Samuel Wolff, President of Wolff Shoe Manufacturing Company:

The big change I have seen in the last ten years is the growth of new competition in shoe machinery, and the greater number of new types of machines which are offered. Some of these, after trial, work out to be advantageous to us; some of them don't. There are so many new developments that it has become an expense to try them out. The shoe industry has also been affected by the profusion of style ideas brought back from buyers' visits to Europe (particularly Italy) which have led manufacturers to produce many more models of shoes each season.

We have Compo sole-laying machines in all our factories, and buy them on five-year terms. If it turns out to be desirable, I can turn a machine, not yet fully paid for, back to Compo for credit on a newer machine if one comes out. I buy United machinery if I can expect it to pay for itself in three years; but if the machine investment is large, I renew the lease.

After looking at a United heat-setting machine, I decided to install instead one which is made in England. I purchased it, and now have them installed in all our factories.

I returned our United bed machines and replaced them with Industrial Shoe Machinery Co. toe lasters. These machines will have paid for themselves in five years, and I will own them outright. We have attached a cylindrical device obtained elsewhere to a Naumkeag buffer which I had purchased under the discount Plan; it works well. I buy some machinery from Western Supplies Company, and work with them in making improvements. I find ample competition among machinery manufacturers, and I am able to be flexible and selective in acquiring machinery. (D. Ex. 37, admitted Tr. 609)

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T. R. Volenetz, director of manufacturing of Brown Shoe Company:

I am familiar with the kinds and makes of shoe machinery, both as an actual operator and as an executive. It is essential to be constantly alert for better methods of production and better machinery and I have visited the National Manufacturers Association shoe machinery shows in Cincinnati, and Atlantic City, have made trips abroad, have visited other manufacturers' plants to see machinery in operation, and have brought in machines for trial and comparison with machines already performing work in our factories.

We have a lower percentage of United machines in our factories than at the time of the decree, as a result of the International machines, thermolaster and toelasters, Compo toelasters, competitive clicking machines and other machines which were not available in earlier times. The shoe machinery market is strongly competitive. There are now three makes of toelasters approximately equal in productivity, cost and quality (Compo, United, and International); and similar choices are available with respect to other machinery. There are also many more different types of machines

now available than in 1955. In addition, there is a variety of European machinery available in this country, even for the welt process. It is hard to think of any particular United machine for which you cannot now obtain an adequate substitute. (D. Ex. 38, admitted Tr. 609)

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Edward J. Riley, Jr., Vice President and member of Board of Directors of International Shoe Company:

International has many types of machines distributed by manufacturers which are competitors of United. Examples are: SAS skivers, Shcwabe sole presses and wood heel attaching machines, Compo ruffing and toe lasting machines, Astra combination lasting machines, Hawkes heel trimmers, Desma vulcanizers, International Shoe Machinery side and toe lasters, Prime rib attachers, Young nailers, etc. In addition, International uses machinery made in Europe including the following brands: Ralph's, Bata and Pedersen (whose Jupiter stitchers were used exclusively during the past three years in one factory, until August 1964 when they were replaced with a better machine distributed by United). There is more activity in the European machinery market than there was ten years ago.

There appears to be more competition in the shoe machinery market than there was ten years ago and, in my opinion, this condition is healthy. In part, this increased competition has resulted from changes in process previously described and, in part, from developmental break-throughs, such as the Astra combination laster which is less expensive than anything previously available. Such changes and developments have, in turn, stimulated more competitive efforts by others. United, Plymouth, International Shoe Machinery, Southern Machinery, Compo and other machinery sources all compete vigorously. The percent-

age of United's machines in International's factories has decreased from what it was ten years ago, and the rentals and royalties paid by International to United have also decreased. (D. Ex. 39, admitted Tr. 609)

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Robert S. Lockridge, President of Craddock-Terry Shoe Corp.:

8. Regarding new methods and machines, certain of my associates and I keep in close touch with available machines and developments. I am in contact with many other shoe manufacturers and visit many shoe plants. I have never found the slightest hesitation on the part of other manufacturers to show me their factories and operations and this interchange of information as to technology and equipment is continuing. A member of our staff devotes full time to machinery matters and like myself is at all times in touch with other factories. We attend the Factory Management Conferences and other technical and machinery exhibitions and are always in contact with suppliers' representatives. We maintain familiarity with the equipment available or under development for the different operations. We particularly try to be aware of all technological advances, new operations and new machine types. We are also continually in touch with the second-hand machine markets.

9. Whenever we consider taking on a new machine type, we hold competitive trials of all machines available for the purpose. The machines and the results of the trials are studied by our machinery expert, the head of our rate setting department, and the head of our production. They make a recommendation to me as between the competing machines and I make the ultimate decision. Through such competitive trials and this process, we have bought or leased Cox & Wright

heat setters, Jupiter outsole stitchers, International and United toe lasters, Lamac presses for sole laying, Astra pulling over and toe lasting machines and other types.

11. We have in use in our factories machines manufactured by 23 different companies in addition to our United machine. In number these machines aggregate 446, of which 163 are leased and 283 owned. We have 19 Compo machines, 40 International, 10 Lamac, 10 Schwabe, 15 Young, 72 Freeman, 2 Astra, 2 Cox & Wright, 61 Boston Machine Works and varying quantities manufactured by others. For our women's Littleway shoes we last shanks with the United staple side laster, foreparts with International machines and toes with both International and United toe lasters, of which we have 25 and 20, respectively; and soles are attached with United sole attaching machines. On our cement shoes we use International side lasters exclusively for shanks and foreparts on all heel-heights up to 10/8's and on the higher-heel shoes the United staple side laster for shanks, International machines for foreparts; for toes, both International and United toe lasters; and for sole attaching Compo, Schwabe and United machines, of which we have 1, 10 and 17, respectively. We also use 2 Astra pulling over and toe lasting machines and 2 Cox & Wright heat setters on this production. On Goodyear welt production we use Prime Manufacturing Company's insole machinery, 8 Jupiter stitchers for our outsole stitching, and 10 Lamac presses for sole laying before outsole stitching. (D. Ex. 40, admitted Tr. 609)

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Julian Samuels, President of Samuel Shoe Co.:

Excluding dry-thread machinery and including clickers, I would say that in the area of 65% of our ma-

chinery was manufactured by United Shoe Machinery corporation, and that we own about half of them. Most of this owned machinery was purchased under the discount Plan, after the decree. Sometimes we purchase new machines from United; sometimes we lease them. We also obtain machinery from other sources such as Compo, Dania, and Schwabe.

There is definitely more competition in shoe machinery than there was ten years ago. The European influence (Albeko, Ghini, etc.) and the Pirmasens Shows have stimulated domestic manufacturers. This can be seen at the Atlantic City Shoe Machinery Show, at foreign shows, in trade publications, advertising circulars, and elsewhere. (D. Ex. 41, admitted Tr. 609)

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Abraham Weinman, President of Five Star Footwear Company:

There is no question that the number of shoe machinery sources has increased over the past ten years, and that our acquisition of machinery are made from more of these sources, including the second-hand market.

Competition among shoe machinery manufacturers is vigorous, and new developments in shoemaking come rapidly. (D. Ex. 44, admitted Tr. 609)

APPENDIX B

Excerpts from Affidavits of Executives of Shoe Manufacturing Companies Regarding Competition Among Shoe Machinery Companies in the Supply of Machines Adapted to New Shoe-Making Processes.

James Forma, President of Lawrence Maid Footwear:

> Since coming to Lawrence I have broken up my conveyor lines, because the new machines introduced with the new cement techniques have enabled me to combine operations. I can foresee a development in shoe manufacture which will render obsolete United's insole tackers, assemblers, and heel seat lasters. In fact, my Lauretti heel molder is doing that just now. As a result of the speed-up and flexibility in manufacture, my factory now plans to give four-week delivery and depends upon re-orders for its continued business. (D. Ex. 24, admitted Tr. 609)

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John R. DeWitt, Vice President for Manufacturing of J. F. McElwain Company, a division of Melville Shoe Corporation:

> 3. The changes and developments in the McElwain manufacturing process described in Mr. Gleason's affidavit sworn to September 4th 1964 have of course required frequent changes in our machinery inventory, and changes have also been required by the constant changes of style that are going on at all times. In general, we have found that the cement process for men's shoes has not been as fully developed by United's production of machines as it has for women's shoes, which was the larger field and therefore received first attention from United. The cement-attaching and -lasting machines are generally less complicated than the welt machines we have been using in the past. What has rendered the cement process possible for

male footwear is the technological improvement in cements in the last ten or twenty years; with the development of neoprene and hot melt cements, the new processes and newer, lighter machines have been brought into service for us as well as other manufacturers.

The machinery development outside of United Shoe Machinery Corporation has been in the direction of this simpler type of machine which has been produced by International, Compo, Allied, Schwabe, Lewiston Machinery Company, Independent Shoe Machinery Company and others. I am fully convinced that future development in our men's and boys' shoes must be in the direction of improved cement process shoes. The drive on the part of other manufacturers as well as ourselves is toward the simpler processes tending toward increased automation. This is largely caused by the necessity of economizing on labor cost, by cutting down the skill required, which is a factor in shortening the training cycle through simpler machines. In our manufacture the cost of labor is approximately 30% of the total cost of shoe production.

4. The greatest impact of the developing cement process on shoe machinery has been in the lasting and bottoming field through the combination of operations so as to reduce the number. For example, as to United machines the cement process has tended to push out of our factories the Rex pulling over machine, the inseaming machine, the outsole stitching machine, the levelling machine, and staple side-lasters. We no longer need, or need to a much less degree, machines for heel burnishing, and edge setting. In fact, we have in some of our manufacture no heeling at all. (D. Ex. 26, admitted Tr. 609)

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George M. Haddad, President Quaker Shoe Corporation:

> Tennis and leather vulcanized shoes, comprising approximately one-third of our total production, are made on Desma (German) vulcanizing machines which we purchased from International Vulcanizing Corporation for around $200,000. This vulcanizing is a new process, which I first heard of about four years ago. United has no equivalent machine for it. We started using the process around 1962. Its method of manufacture is still fairly tricky, being dependent upon absence of fats from the leather, accuracy of heat control in the machine, and similar technical difficulties. It is new and still needs working out in technical details. (D. Ex. 27, admitted Tr. 609)

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John S. Zulick, Treasurer of J. S. Zulick Co.:

> Our problem has been to some extent that the machinery developments during the last five years (both from United and from others) have tended to be in cement process machines useful for high volume production and not adaptable for our factory purposes. There is ample competition in the shoe machinery line, and I can understand, in view of the high volume production of cement shoes, that shoe machinery manufacturers concentrate their development efforts and resources in that area. (D. Ex. 28, admitted Tr. 609)

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Richard P. Curtis, Vice President and Secretary of Curtis-Stephens-Embry Co.:

> 4. Substantially all of the machinery we use for our welt shoes is made by United Shoe Machinery Corporation. Exceptions are the Hawke edge trimmer, Freeman tack puller, and Prime insole machine. I would

say perhaps 95% of our welt process machinery is United.

On the cement side of our production, the proportion of United machines would be almost reversed. Very few United machines are employed there. Our production of this type of shoe has increased markedly in the past three or four years, and our success with the "Miss Pappagallo" shoes (which are also cements) has encouraged us to use cements more in our other shoes as well. This is in response to market acceptance and demand.

On cement shoes, we use only three types of United machines: pulling-over, assembling and heel seat lasting machines. We use machinery manufactured by International Shoe Machine Corporation for toe lasting and for side lasting. We use machines manufactured by Compo Shoe Machinery Company for bottoming, sole attaching, and auxiliary operations. We once used United bed lasting machines in that connection, (and bought them at discount when they became available under the Plan for Terminating Form A Leases) but now no longer employ them for major lasting operations. We still own and occasionally use the United machine on shoes with straight counters, as a sort of auxiliary machine, but have replaced the United with the Kamborian (International) machines for our major side lasting and toe lasting.

We replaced the United with Kamborian side lasting machines some twelve or fifteen years ago, when we started making the flat-lasted shoes for which the Kamborian machine was well adapted. We replaced the United with International toe lasting machines a few years ago when International improved them with thermoplastic cement and Teflon wiping pads. (D. Ex. 31, admitted Tr. 609)

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Milton Carmel, partner in Sham-O-Kin Shoe Company:

> In this preference, I also consider the chance that a new process in shoemaking may change the type of machine I want to use. In the past ten years, I have seen two striking occasions of this. First, when the Amalfi contruction grew to a peak recently, it made necessary a roughing operation which utilized a machine that United does not manufacture. We perform that operation on Ludlow roughers. Thus the Ludlow Company has come in and filled a need when it arose, and so obtained that business.
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> The second such example occurred about three years ago when various companies offered combination pulling over-toe lasting machines. This new combination of two older operations was satisfactorily done for us by a machine offered by Herman Schwabe Inc. We tried the United and competitive machines for this purpose, but found that the United machine did not work as efficiently or economically in our factory upon the double linings we use. The Schwabe machine worked more satisfactorily, its price was economical for us, and so we purchased and have used that machine. (D. Ex. 32, admitted Tr. 609)

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Harvey C. Steffy, President and Treasurer of Steffy Shoe Co.:

> Our equipment was very simple when we started in operation. We had a United clicker, a United lasting machine, a few hand machines and home made items, and later on a stitching machine. We have grown to have a great many more machines, including machines made by United, Schwabe, and others. I change machines from time to time as the models alter and improve.

For example, I changed from United to a Schwabe Heel Seat Laster in 1962 or 1963. I tested the new United Model F, but found I had trouble nailing the small shoes our factory makes. I tried the Schwabe machine and bought it. I am still looking for something better, but I feel the Schwabe machine is the best available at present. In my experience, it is hard to find machinery (of whatever manufacture) which is well adapted to making the little shoes worn by infants. (D. Ex. 33, admitted Tr. 609)

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Abraham B. Rubin, Vice President of Muskin Shoe Co.:

4. This transition has had an effect upon the types of machinery which we use. For example, we no longer have left a single stitching machine (except for some ORL's which we use for moccasin stitching) although such machines were a necessity for our earlier methods of production. We have returned to United their heeling equipment, lasting machinery, and others. Due to the changes in shoe construction, we have no further use for their machines of these types. (D. Ex. 34, admitted Tr. 609)

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Harold Goldberg, Chairman of the Board of Evangeline Shoe Co.:

6. As to lasting, from 1951 on we tack-lasted the heel seats, staple-lasted the shanks and cement-lasted the foreparts and toes. For the foreparts we started with latex cement and used at various times hand-lasting, the hexagonal roll-lasting, the United forepart laster, and the International Model C laster. In 1963 we stabilized this part of the process by taking in International's Thermalasters for forepart-lasting with thermoplastic cement. This eliminated one operation. For the toes we had first used the United No. 6 ma-

chine with pyroxylin and upstanding tacks which gave us a production of 300 pairs per day per operator. When open toes went out and were replaced by closed toes about 1955, we began to use United's TLA-D with pre-applied latex after trimming out on a box toe and lining trimming machine. This machine and cement enabled us to increase productivity from 300 pairs per operator per day to 900 pairs. As toes became semi-pointed in 1958 and 1959 the TLA-D failed to give us the required quality and we replaced it with United's LMA, with the resin cement applicator. The result was to eliminate the latex cementing operation. About 1960 sharp toes (needles, double needles, and triple needles) came in and the LMA in turn failed to give us the needed quality. We then took on the United power toe lasters and the International power toe lasters, using thermoplastic cement with each. For the old bed machine operators we took the United toe lasters, but for other operators we took the International toe lasters because this was a simpler machine. It was easier to train operators on and we had, in the circumstances, to train operators in one plant quickly.

7. We never went to cement-lasting for shanks because we could not get the proper draft with a cement lasting machine. At that time we were making at least 50% high heels and were also using long counters. These features did not in our judgment permit the use of cement-lasting and at the same time give us the proper quality.

8. In the course of the evolution above described the United forepart cement laster, TLA-D, box toe and lining trimmer and bottom ironer were eliminated from our machine line. All the foregoing changes of process in machinery were put into effect by us in the constant endeavor to attain high quality style to meet new requirements for flexibility and shape, and at the

same time attain the utmost possible economy in view of the very sharp competition we have with other women's dress shoe manufacturers. (D. Ex. 35, admitted Tr. 609)

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Samuel L. Slosberg, Chairman of the Board of The Green Shoe Manufacturing Company:

6. Historically the Company first used United's stitch-down machines, which were returned when the process was given up in the 1920's. The machines for the Goodyear welt and Silhouwelt production have been largely of United manufacture. When the Company began its flat-lasted cement production in the mid-1930's, it at first used the United fluid-bag sole attaching press. It later installed the entire line of Compo machines, including toe pounders, roughers, cementing machines and 6-station and 2-station presses, along with one United 2-station press. This is the equipment which has been continuously used for the Company's flat-lasted cement production. (D. Ex. 36, admitted Tr. 609)

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T. R. Volenetz, director of manufacturing of Brown Shoe Company:

Government representatives have recently supplied us with the following list of 18 types of machines as a basis for information they are requesting:

1. Clicking
2. Eyeletting
3. Cutting Press
4. Pulling Over
5. Lasting
6. Welt Sewing
7. Inseam Trimming
8. Outsole Laying
9. Rough Rounding

10. Outsole Stitching
11. Cement Sole Attaching
12. Littleway Lockstitch
13. McKay Chainstitch
14. Loose Nailing
15. Outsole Leveling
16. Fibre Fastening
17. Heel Attaching
18. Slugging

The first five machines on that list are used fairly generally on a majority of shoes. Such of the remainder as the machines for welt sewing, inseam trimming, rough rounding, McKay chainstitch and loose nailing are adapted to dying processes, and are used less and less. The McKay chainstitch machine, for example, has not been used to any degree in the last fifteen years. We stopped doing loose-nailing (welt process) about ten years ago. No stitch-downs to speak of have been made for the last ten years.

By comparison, in 1960-1 we started using injection moulding for the manufacture of children's shoes. This process moulds the heel and sole (a PVC-poly-vinyl-chloride-bottom) on to the leather upper. This method of construction, which has grown in use in our "Robin Hood" line since that time, replaces all the machinery previously used for sole-laying, edge-trimming and heel-attaching. Where this process is used instead of the welt construction for similar shoes, it displaces every machine numbered 7-18 on the above list. (D. Ex. 38, admitted Tr. 609)

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Edward J. Riley, Jr., Vice President and member of the Board of Directors of International Shoe Company:

In addition to responding to consumer demand International is interested in making shoes by cement proc-

esses for various other reasons. Such shoes are less expensive to make than welt shoes. Manufacture of shoes by cement processes requires less machinery, fewer operators and less production space. In my experience when International changes a factory from welt to cement production, it obtains a 20 percent increase in the amount of space available and comparable increase in factory productivity. More advanced methods of shoe making offer still greater economies. Just as the cement process requires fewer operators than the welt process, the newer injection molding process requires even fewer operators.

These changes have produced a direct effect upon International's use of machinery distributed by United Shoe Machinery corporation (hereinafter referred to as ("United"). International's principal use of machines distributed by United has been in the areas of the lasting, bottoming and finishing operations. Those operations utilize the last fourteen of eighteen machine types listed in a recent communication received by International from the U.S. Department of Justice and changes in process, from welts to cements and injection molding, renders ten of those fourteen machine types, to a degree, unnecessary to shoe manufacture. The eighteen machine types listed in the communication were, as follows:

1. Clicking
2. Eyeletting
3. Cutting Press
4. Pulling Over
5. Lasting
6. Welt Sewing
7. Inseam Trimming
8. Outsole Laying
9. Rough Rounding
10. Outsole Stitching

11. Cement Sole Attaching
12. Littleway Lockstitch
13. McKay Chainstitch
14. Loose Nailing
15. Outsole Leveling
16. Fibre Fastening
17. Heel Attaching
18. Slugging

A majority of these machines are used in the manufacture of shoes by the welt process. International has noticed increased competition in this field. For example, in International's shoe factories producing men's cement shoes all of United's pulling-over machines have been replaced with Astra combination lasters and all of United's toe lasters in those factories have been returned to United.

International is now making 6,000 pairs per day of women's and teens' playshoes in a particular factory by the string-lasted vulcanized process. This manufacturing method, which has been used by International for about three years, uses no machinery distributed by United except clickers and eyletters owned by International; the Desma vulcanizer (a German machine) does all the rest. There is no lasting and no sole attaching in this process.

Similarly International is now using the relatively new injection molding process in two factories and will install the process in a third factory shortly. That process has been utilized by International since 1960 and with it International is now producing 16,000 pairs per day of juveniles', boys' and men's service oxfords and dress shoes. In this method of manufacture all bottoming and finishing operations are rendered unnecessary for the sole is molded on after the upper emerges from the lasting room. In this process no use

is made of thirteen of the eighteen machine types previously listed.

The effect of these changes in International's requirements for machinery has led to returns of substantial numbers of machines to United, including welt machinery, stitchdown machinery, toe lasters of all types, stitchers, heelers and others. A review of International's machinery orders and returns for the past six years shows that in each of those years International has returned more machinery to United than International ordered from United. The figures are, as follows:

	Orders	Returns	Net Returns
1958	248	385	137
1959	312	377	65
1960	192	276	84
1961	334	397	63
1962	201	304	103
1963	21	375	354

(D. Ex. 39, admitted Tr. 609)

* * *

Robert S. Lockridge, President of Craddock-Terry Shoe Corp.:

11. There is now a great deal of competition among machinery manufacturers and distributors to supply equipment for newer processes and operations, to substitute newer operations and machines for those previously in use, to supplant existing methods and machines and to supply new machines for earlier operations, such as pulling over and toe lasting machines, outsole stitchers, sole laying machines, back-part molding machines for assembly and other operations and other types. This competition is growing and in my judgment will continue to grow as technological change

brings new methods and simpler operations. (D. Ex. 40, admitted Tr. 609)

* * *

Julian Samuels, President of Samuel Shoe Co.:

These developments are linked with changes in the machinery used in the factory. Considerable factors in our increased rate of processing shoes have been the installation of fitting room conveyors manufactured by SAKAS of Lancaster, Ohio, and greater efficiency in the lasting room. Our lasting and bottoming operations have gone through various machinery changes in the past few years. For example, we had Compo toe-lasters on trial about two years ago and decided the United PTL-B gave greater productivity and easier training of operators. Despite the good experience we have had with the PTL-B, we are now experimenting with an Albeko automatic toe-laster. We changed some of our Rex Pulling-Over machines about three years ago to a console model which we found more efficient, easier to operate, and a little faster. This new model became available about 8 years ago. We have a new heat setting machine which reduces the amount of time that shoes must spend on the last. About a year ago we installed a Fostoria cement drying machine which dries cement in 8-9 minutes instead of three and a half hours.

We now have four Compo and two United sole presses which do our sole-laying, also laying the flap of the outsole in one operation. Our present tabless breast leaf trimming machines give far greater productivity than when formerly done by hand. Our present automatic sole-buffing machine eliminates presanding, which required hand operations while the shoe was on the last. Seven or eight years ago we installed a Compo sole end splitter (after trying both

Compo and United) in a change required by our tabless method of construction. (D. Ex. 41, admitted Tr. 609)

* * *

Adolph K. Krause, President of Wolverine Shoe & Tanning Company:

6. Our Hush Puppies are pulled over and side lasted in four different ways. In one line we use the Astra (foreign) pulling over and toe lasting machine (cement) and the International Shoe Machine Corporation's cement laster. A second uses the United pulling over and toe lasting machine (cement) and the International cement laster. A third uses the United puller with cement only (no tacks) and the United semi-automatic toe laster. In the fourth line side-lasting by cement is done by hand. Heel seat lasting is presently done with tacks, but one factory is experimenting with cement applied by the United heel seat laster and with back part molding. Sole attaching is done with Compo, Schwabe and United machines, the latter about 40% of the total. We are thinking seriously of eliminating the cement side-lasting machines and substituting hand lasting by cement for the work not done by the pulling and toe lasting or the toe lasting machines. We figure that cement heel seat lasting satisfactory for our shoes will be available in perhaps six months.

8. There have been many changes in the shoe industry since 1955. In many ways there is less reliance on United. Managements are more aware of technological developments and more alert to take advantage of them. Competition is ever keener. As the demand for light footwear has spread, ways of satisfying it have increased. An example is the invasion of what used to be the markets for conventional footwear by fabric upper—rubber bottom shoes, including sneakers. This development has inspired new com-

petition in other forms. Our development of the Hush Puppy was a direct result of this invasion. More shoe machines are available, more people are producing them and there is a wider choice. We try hard to take advantage of this situation. We try to keep in touch with all machine development, both here and abroad. We do this through the National Association of Shoe Manufacturers, the Factory Management Conference and the various shoe machine exhibits. Our factory managers and research man call on European factories, particularly those of our licensees, and keep informed of new things. We have set up our own research and engineering departments and are developing some machines of our own. For example, the operators of present edge trimming machines are the highest priced labor in the plants. We have 49 United edge trimming machines. We have developed an automatic machine for our edge trimming operations which will supplant all of the present machines except one or two in each factory to correct cripples or in case of trouble. We, like our competitors, are continually seeking to reduce costs, especially cost of labor, which is a major factor. Our total employment in the five shoe factories is now 2,350. We manufacture the Hush Puppies on only three lasts for men and two for women, with probably only 20 different patterns. All of our production is for stock and we run two shifts steadily, but are always short of stock. Our in-stock inventory runs upwards of 2,000,000 pairs and turns over upwards of four times per year. By these methods we have steadily brought our labor costs down while piece rates have gone up. (D. Ex. 42, admitted Tr. 609)